Skerton St Luke's CE Primary School
Subject Leader Overview for Computing

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1	Text and images use technology purposefully to create, organise, store, manipulate and retrieve digital content	Digital research use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies	Computational thinking use logical reasoning to predict the behaviour of simple programs	recognise common uses of information technology beyond school	Digital Research understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Programming create and debug simple programs
Y2	Word Processing Digital Mapping – Digimaps, Google Maps and Google Earth We are photographers (Taking better photographs) Recognise common uses of IT beyond school.	We are painters (illustrating an e-book) Use technology to purposefully create, organise, store. Manipulate and retrieve digital content.	We are astronauts (Programming on screen) Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions	Data Handling: Favourite food and drinks Use technology to purposefully create, organise, store. Manipulate and retrieve digital content. Use technology safely and respectfully	We are programmers (Espresso Coding) Create and de-bug simple programs Use logical reasoning to predict the behaviour of simple programs	We are researchers (researching seaside holidays in the past) Use technology to purposefully create, organise, store. Manipulate and retrieve digital content.

Y3	Movies/Multimedia understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration Use a variety of software and devices to create digital assets such as programs, multimedia content	Programming/ Computational thinking use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Use more complex simulations and understand the effects of changing variables	Digital research understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration Develop their search strategies further by refining their use of key words and starting to use key phrases and questions	Programming/ hardware design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Plan and write algorithms using sequence, repetition and further develop their computational thinking strategies to solve problems.	Communication and collaboration/networking use sequence, selection, and repetition in programs; work with variables and various forms of input and output Have knowledge and experience of using a range of different inputs and outputs	Presenting Information use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Use a variety of software and devices to create digital assets such as programs, graph content
Y4	Programming/ hardware . To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts . To use sequence, selection, and repetition in programs; work with variables and various forms of input and output . To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Data handling . To select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. . To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	Graphics/ images/ modelling and simulation . To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	Sound/ Multimedia . To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	Digital research . To understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration . To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. . To select, use and combine a variety of software (including internet services) on a range of digital devices to design and	Computational thinking . To understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration . To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. . To select, use and combine a variety of

					create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Y5	Data handling To select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. . To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report	Collaboration networking reinforce messages about using technology safely Use strategies to verify and evaluate the reliability and accuracy of information.	Modelling . To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	Programming/ computational thinking use sequence, selection, and repetition in programs; work with variables and various forms of input and output Understand how search engines work Further develop computational thinking showing they can plan and decompose tasks	Multimedia use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a range of software and use a wider range of devices to create a variety of digital assets such as programs, systems, databases, spreadsheets and multimedia content.	Programming design, write and debug programs that accomplish specific goals Design and write programs using sequences

Y6	IT / DL - digital research	IT – multimedia	CS - computational thinking	IT / CS / DL - digital research, communication and collaboration / networking	CS - programming / computational thinking / hardware
	Understand computer networks including the internet; such as the world-wide web; and the opportunities they offer for communication and collaboration select, use and combine a variety of software on a range of digital devices to design and create a range of programs to present data and information Know how search engines work and what 'ranking' is when related to search engines	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Be competent users of technology using it safely. Understand what acceptable and unacceptable online behaviour is	use sequence, selection, and repetition in programs; work with variables and various forms of input and output Design and create more complex programs using sequences. repetition, selection and variables appropriately.	reinforce messages about using technology safely Use strategies to verify and evaluate the reliability and accuracy of information.	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Be confident in their knowledge of inputs and outputs and plan/write programs to solve tasks to control external devices such as motors.